RAW SEQUENCE LISTING PATENT APPLICATION US/09/534,717

DATE: 04/15/2000

TIME: 12:52:15

Input Set: I534717.RAW

This Raw Listing contains the General Information Section and up to first 5 pages.

P. 5

```
<110> APPLICANT: Jochen, Salfeld et al.
    <120> TITLE OF INVENTION: Human Antibodies That Bind Human IL-12 And Methods For Pr
     <130> FILE REFERENCE: BBI-093CP
                                                      ENTERED
     <140> CURRENT APPLICATION NUMBER: US/09/534,717
     <141> CURRENT FILING DATE: 2000-03-24
    <150> EARLIER APPLICATION NUMBER: 60/126,603
    <151> EARLIER FILING DATE: March 25, 1999
     <160> NUMBER OF SEQ ID NOS: 675
 8
     <170> SOFTWARE: PatentIn Ver. 2.0
 9
    <210> SEQ ID NO 1
10
    <211> LENGTH: 6
11
     <212> TYPE: PRT
12
     <213> ORGANISM: Homo sapiens
13
14
    <220> FEATURE:
    <223> OTHER INFORMATION: Xaa at position 1 could be either His or Ser
     <220> FEATURE:
16
     <223> OTHER INFORMATION: Xaa at position 4 could be either Tyr or His
17
    <220> FEATURE:
18
    <223> OTHER INFORMATION: Xaa at position 6 could be either Tyr, Asn or Thr
19
     <400> SEQUENCE: 1
20
           Xaa Gly Ser Xaa Asp Xaa
21
22
            1
                       5
23
     <210> SEQ ID NO 2
    <211> LENGTH: 12
24
    <212> TYPE: PRT
25
    <213> ORGANISM: Homo sapiens
26
27
    <220> FEATURE:
    <223> OTHER INFORMATION: Xaa at position 2 could be either Ser or Thr
28
     <220> FEATURE:
29
    <223> OTHER INFORMATION: Xaa at position 4 could be either Asp or Glu
30
    <223> OTHER INFORMATION: Xaa at position 5 could be either Ser, Arg/or Lys
32
     <220> FEATURE:
33
    <223> OTHER INFORMATION: Xaa at position 6 could be either Ser, Gly or Tyr
34
    <220> FEATURE:
     <223> OTHER INFORMATION: Xaa at position 7 could be either Leu, Phe, Thr or
36
37
38
    <220> FEATURE:
     <223> OTHER INFORMATION: Xaa at position 8 could be either Arg, Ser, Thr,
40
          Trp or His
    <220> FEATURE:
41
    <223> OTHER INFORMATION: Xaa at position 9 could be either Gly or Pro
42
43
    <220> FEATURE:
    <223> OTHER INFORMATION: Xaa at position 10 could be either Ser, Thr, Ala
```

RAW SEQUENCE LISTING PATENT APPLICATION US/09/534,717

DATE: 04/15/2000 TIME: 12:52:15

Input Set: I534717.RAW

```
or Leu
        45
             <220> FEATURE:
        46
             <223> OTHER INFORMATION: Xaa at position 11 could be either Arg, Ser, Met,
        47
                   Thr or Leu
        48
        49
             <220> FEATURE:
             <223> OTHER INFORMATION: Xaa at position 12 could be either Val, Ile, Thr,
        50
                   Met or Leu
        51
                   SEQUENCE: 2
Gln Xaa Tyr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
             <400> SEQUENCE: 2
        52
        53
W-->
             <210> SEQ ID NO 3
        55
             <211> LENGTH: 17
             <212> TYPE: PRT
        57
             <213> ORGANISM: Homo sapiens
             <400> SEQUENCE: 3
        59
                   Phe Ile Arg Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val Lys
        60
                                                         10
        61
                     1
                   Gly
             <210> SEQ ID NO 4
        63
             <211> LENGTH: 7
             <212> TYPE: PRT
        65
             <213> ORGANISM: Homo sapiens
             <220> FEATURE:
        67
             <223> OTHER INFORMATION: Xaa at position 1 could be either Gly or Tyr
             <220> FEATURE:
        69
             <223> OTHER INFORMATION: Xaa at position 3 could be either Asp or Ser
        70
             <220> FEATURE:
        71
             <223> OTHER INFORMATION: Xaa at position 4 could be either Gln or Asn
        72
             <400> SEQUENCE: /4 /
        73
                   Xaá Asn Xaa Xaa Arg Pro Ser
        74
                     1
        75
             <210> SEQ ID NO 5
        76
             <211> LENGTH: 9
        77
        78
             <212> TYPE: PRT
             <213> ORGANISM: Homo sapiens
        79
        80
             <220> FEATURE:
             <223> OTHER INFORMATION: Xaa represents either Ser or Glu
        81
             <400> SEQUENCE: 5
        82
                   Phe Thr Phe Ser Xaa Tyr Gly Met His
        83
        84
                     1
             <210> SEQ ID NO 6
        .85
             <211> LENGTH: 13
        86
             <212> TYPE: PRT
        87
             <213> ORGANISM: Homo sapiens
        88
             <220> FEATURE:
        89
             <223> OTHER INFORMATION: Xaa at position 1 could be either Ser or Thr
        90
             <220> FEATURE:
        91
             <223> OTHER INFORMATION: Xaa at position 3 could be either Ser or Gly
        92
             <220> FEATURE:
        93
             <223> OTHER INFORMATION: Xaa at position 4 could be either Arg or Ser
```

RAW SEQUENCE LISTING PATENT APPLICATION US/09/534,717

DATE: 04/15/2000 TIME: 12:52:15

Input Set: I534717.RAW

```
95
      <220> FEATURE:
      <223> OTHER INFORMATION: Xaa at position 8 could be either Gly or Val
 96
      <220> FEATURE:
 97
      <223> OTHER INFORMATION: Xaa at position 9 could be either Ser or Ala
      <220> FEATURE:
 99
      <223> OTHER INFORMATION: Xaa at position 10 could be either Asn, Gly or Tyr
100
101
      <220> FEATURE:
      <223> OTHER INFORMATION: Xaa at position 11 could be either Thr or Asp
102
      <220> FEATURE:
103
      <223> OTHER INFORMATION: Xaa at position 13 could be either Lys or His
104
      <400> SEQUENCE: 6 (
            Xaa Gly Xaa Xaa Ser Asn Ile Xaa Xaa Xaa Xaa Val Xaa
106
107
108
      <210> SEQ ID NO 7
109
      <211> LENGTH: 115
      <212> TYPE: PRT
110
111
      <213> ORGANISM: Homo sapiens
112
      <220> FEATURE:
      <223> OTHER INFORMATION: Xaa at position 6 could be either Gln or Glu
      <220> FEATURE:
114
      <223> OTHER INFORMATION: Xaa at position 16 could be either Arg or Gly
115
      <220> FEATURE:
116
      <223> OTHER INFORMATION: Xaa at position 31 could be either Ser or Glu
117
118
      <220> FEATURE:
      <223> OTHER INFORMATION: Xaa at position 84 could be either Lys or Asn
119
      <220> FEATURE:
120
      <223> OTHER INFORMATION: Xaa at position 97 could be either Thr, Ala or Lys
      <220> FEATURE:
122
      <223> OTHER INFORMATION: Xaa at position 98 could be either Thr or Lys
123
124
      <220> FEATURE:
     <223> OTHER INFORMATION: Xaa at position 99 could be either Ser or His
125
      <220> FEATURE:
126
      <223> OTHER INFORMATION: Xaa at position 102 could be either Tyr or His
127
      <220> FEATURE:
128
      <223> OTHER INFORMATION: Xaa at position 104 could be either Tyr, Asn or
129
130
      <400> SEQUENCE: 7
131
            Gln Val Gln Leu Val Xaa Ser Gly Gly Val Val Gln Pro Gly Xaa
132
                                                 10
133
            Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Xaa Tyr
134
135
            Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
136
137
            Ala Phe Ile Arg Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Asx
138
                                     55
139
            Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
140
                                                     75
                                 70
141
           Leu Gln Met Xaa Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
142
                                                90
143
            Xaa Xaa Kaa Gly Ser Xaa Asp Xaa Trp Gly Gln Gly Thr Met Val Thr
```

RAW SEQUENCE LISTING PATENT APPLICATION US/09/534,717

DATE: 04/15/2000 TIME: 12:52:15

Input Set: I534717.RAW

110 105 145 Val Ser Ser 146 115 147 <210> SEQ ID NO 8 148 <211> LENGTH: 112 149 <212> TYPE: PRT 150 <213> ORGANISM: Homo sapiens 151 <220> FEATURE: <223> OTHER INFORMATION: Xaa at position 1 could be either Ser or Gln 152 153 <220> FEATURE: <223> OTHER INFORMATION: Xaa at position 2 could be either Tyr or Ser 154 155 <220> FEATURE: <223> OTHER INFORMATION: Xaa at position 13 could be either Thr or Ala 156 157 <223> OTHER INFORMATION: Xaa at position 23 and 91 could be either Ser or 158 159 Thr 160 <220> FEATURE: <223> OTHER INFORMATION: Xaa at position 25 could be either Gly or Ser 161 162 <223> OTHER INFORMATION: Xaa at position 26 could be either Arg or Ser <220> FEATURE: 163 164 <220> FEATURE: <223> OTHER INFORMATION: Xaa at position 30 could be either Gly or Val 165 166 <220> FEATURE: <223> OTHER INFORMATION: Xaa at position 31 could be either Ser or Ala 167 168 <220> FEATURE: <223> OTHER INFORMATION: Xaa at position 35 could be either Lys or His 169 170 <220> FEATURE: <223> OTHER INFORMATION: Xaa at position 51 could be either Gly or Lys 171 172 <220> FEATURE: <223> OTHER INFORMATION: Xaa at position 54 could be either Gln or Asn 173 174 <220> FEATURE: <223> OTHER INFORMATION: Xaa at position 79 could be either Val or Leu 175 176 <220> FEATURE: <223> OTHER INFORMATION: Xaa at position 93 could be either Asp or Glu 177 178 <220> FEATURE: <223> OTHER INFORMATION: Xaa at position 94 could be either Ser, Arg or Lys 179 180 <223> OTHER INFORMATION: Xaa at position 95 could be either Ser, Gly or Tyr 181 182 <223> OTHER INFORMATION: Xaa at position 96 could be either Leu, Phe, Thr 183 184 or Ser 185 <223> OTHER INFORMATION: Xaa at position 97 could be either Arg, Ser, Thr, 186 187 Trp or His 188 <220> FEATURE: <223> OTHER INFORMATION: Xaa at position 98 could be either Gly or Pro 189 190 <223> OTHER INFORMATION: Xaa at position 99 could be either Ser, Thr, Ala <220> FEATURE: 191 192 or Leu 193 <220> FEATURE: 194

RAW SEQUENCE LISTING PATENT APPLICATION US/09/534,717

DATE: 04/15/2000 TIME: 12:52:15

Input Set: I534717.RAW

```
<223> OTHER INFORMATION: Xaa at position 100 could be either Arg, Ser, Met,
   195
                Thr or Leu
   196
          <220> FEATURE:
   197
          <223> OTHER INFORMATION: Xaa at position 101 could be either Val, Ile, Thr,
   198
                Met or Leu
    199
          <220> FEATURE:
    200
          <223> OTHER INFORMATION: Xaa at position 32 could be either Asn, Gly or Tyr
    201
          <220> FEATURE:
    202
          <223> OTHER INFORMATION: Xaa at position 33 could be either Thr or Asp
    203
          <220> FEATURE:
    204
          <223> OTHER INFORMATION: Xaa at position 53 could be either Asp or Ser
    205
          <400> SEQUENCE: 8
    206
                Xaa Xaa Val Leu Thr Gln Pro Pro Ser Val Ser Gly Xaa Pro Gly Gln
    207
    208
                Arg Val Thr Ile Ser Cys Xaa Gly Xaa Xaa Ser Asn Ile Xaa Xaa Xaa
    209
                                                  25
    210
                Xaa Val Xaa Trp Tyr Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu
    211
                                              40
    212
                Ile Tyr Xaa Asn Xaa Xaa Arg Pro Ser Gly Val Pro Asp Arg Phe Ser
    213
    214
                Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Thr Gly Xaa Gln
    215
                65 70 75 80.
Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Xaa Tyr Xaa Xaa Xaa Xaa
    216
    217
                      ( / / 85/
    218
                Xaa Xaa Xaa Xaa Phe Gly Thr Gly Thr Lys Val Thr Val Leu Gly
    219
                             100
                                                 105
    220
          <210> SEQ ID NO 9
    221
          <211> LENGTH: 6
    222
          <212> TYPE: PRT
    223
          <213> ORGANISM: Homo sapiens
    224
          <220> FEATURE:
    225
          <223> OTHER INFORMATION: Xaa at position 2 could be either Gly, Val, Cys or
    226
    227
          <220> FEATURE:
    228
          <223> OTHER INFORMATION: Xaa at position 3 could be either Ser or Thr
    229
          <220> FEATURE:
    230
          <223> OTHER INFORMATION: Xaa at position 4 could be either His, Thr, Val, Arg, or I
    231
          <220> FEATURE:
    232
          <223> OTHER INFORMATION: Xaa at position 5 could be either Asp or Ser
    233
          <220> FEATURE:
    234
          <223> OTHER INFORMATION: Xaa at position 6 could be either Asn, Lys, Ala,
    235
                Thr, Ser, Phe, Trp, or His
    236
           <400> SEQUENÇE: 9, / /
    237
                 His Xaa Xaa Xaa Xaa Xaa
    238
                   1
    239
          <210> SEQ ID NO 10
    240
    241
           <211> LENGTH: 12
    242
           <212> TYPE: PRT
           <213> ORGANISM: Homo sapiens
    243
Please Note: <220> FEATURE:
```

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY PATENT APPLICATION US/09/534,717 DATE: 04/15/2000 TIME: 12:52:15

Input Set: I534717.RAW

Line	?	Error/Warning						Original Text										
21	– W		or	"Xaa"	used:	Feature	required	Xaa	Gly	Ser	Xaa	Asp	Xaa					
							required	Gln	Xaa	Tyr	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	X
							required			Xaa								
							required			Phe								
							required	Xaa	Gly	Xaa	Xaa	Ser	Asn	Ile	Xaa	Xaa	Xaa	X
							required	Gln	Val	Gln	Leu	Val	Xaa	Ser	Gly	Gly	Gly	V
							required	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	P
							required	Leu	${\tt Gln}$	Met	Xaa	Ser	Leu	Arg	Ala	Glu	Asp	Т
							required	Xaa	Xaa	Xaa	Gly	Ser	Xaa	Asp	Xaa	Trp	Gly	G
							required										Val	
							required	Arg	Val	Thr	Ile	Ser	Cys	Xaa	Gly	Xaa	Xaa	s
							required	Xaa	Val	Xaa	Trp	Tyr	Gln	Gln	Leu	Pro	Gly	T
							required	Ile	Tyr	Xaa	Asn	Xaa	Xaa	Arg	Pro	Ser	Gly	V
							required	Gly	Ser	Lys	Ser	Gly	Thr	Ser	Ala	Ser	Leu	Α
							required	Ala	Glu	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys	Gln	Х
							required	Xaa	Xaa	Xaa	Xaa	Xaa	Phe	Gly	Thr	Gly	Thr	L
							required	His	Xaa	Xaa	Xaa	Xaa	Xaa				_	_
							required	Gln	Ser	Tyr	Xaa	Xaa	Xaa	Thr	His	Pro	Ala	Ь
							required								Xaa	Lys	Xaa	Т
							required	Xaa	Asn	Asp	Gln	Arg	Pro	Ser				
							required	Phe	Thr	Phe	Xaa	Xaa	Xaa	Xaa	Met	His		
							required	Ser	Gly	Gly	Arg	Ser	Asn	Ile	Gly	Xaa	Xaa	X
							required	Gln	Val	Gln	Val	Xaa	Ser	Gly	Gly	Gly	Val	v -
							required	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	GLY	Phe	T
							required	Gln	Met	Xaa	Ser	Leu	Arg	Ala	Glu	Asp	Thr	A
							required	Xaa	Xaa	Val	Leu	Thr	Gln	Pro	Pro	ser	Val	S
							required	Arg	Val	Thr	Ile	Ser	Cys	Ser	GIA	Xaa	Arg	5
							required	Ile	Tyr	Xaa	Asn	Asp	Gln	Arg	Pro	ser	Gly	٧
							required	Gly	Ser	Lys	Ser	Gly	Thr	Ser	Ala	ser	Leu	A
							required	Ala	Glu	Asp	Glu	Ala	Asp	Tyr	Tyr	Cys	Gln	5
							required	Arg	Val	Thr	Ile	Ser	Cys	Thr	GTA	ser	Ser	5
							required	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Phe	Thr	GTA	Ser	IAI
							required	Glr	Ser	Tyr	Xaa	Xaa	Xaa	Xaa	xaa 	хаа	Ser	M
							required	Glr	Ser	Tyr	Asp	Arg	Gly	Xaa	xaa	хаа	Xaa	X